Riggs, and entitled "System and Method For Generating Identifiers For Uniquely Identifying Object Types For Objects Used in Processing Of Object-Oriented Programs And The Like" (hereinafter identified as the "Waldo et al. patent application"), is incorporated herein by reference in its entirety.

## **IN THE CLAIMS:**

Please cancel claims 42 and 62 without prejudice or disclaimer, amend claims 39 and 59, and add new claims 64-105 as follows:

39. (Amended) The method of claim 34, wherein the first abstract computing machine is contained in a first computer system with a first processor, wherein the second abstract computing machine is contained in a second computer system with a second processor, wherein the second program has second code, and wherein the step of running the first program includes the steps of:

receiving the code by the first abstract computing machine;

converting the code into a format suitable to the first processor by the first abstract computing machine; and

executing the code in the format suitable to the first processor on the first processor, and wherein the step of running the second program includes the steps of:

receiving the second code by the second abstract computing machine;

converting the second code into a format suitable to the second processor by the second abstract computing machine; and

executing the second code in the format suitable to the second processor on the second processor.

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59. (Amended) The computer-readable medium of claim 54, wherein the first abstract computing machine is contained in a first computer system with a first processor, wherein the second abstract computing machine is contained in a second computer system with a second processor, wherein the second program has second code, and wherein the step of running the first program includes the steps of:

receiving the code by the first abstract computing machine;

converting the code into a format suitable to the first processor by the first abstract computing machine; and

executing the code in the format suitable to the first processor on the first processor, and wherein the step of running the second program includes the steps of: receiving the second code by the second abstract computing machine;

converting the second code into a format suitable to the second processor by the second abstract computing machine; and

executing the second code in the format suitable to the second processor on the second processor.

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1300 I Street, NW Washington, DC 20005 202.408.4000 Fax 202.408.4400 www.finnegan.com 64. (New) A method performed in a data processing system including a first computing environment and a second computing environment, the method comprising: executing a first program including first code on the first computing environment; sending a portion of the first code from the first computing environment to the second computing environment based on second code obtained from the second computing environment;

executing the portion of the first code on the second computing environment; and returning results of the executed portion of the first code to the first computing environment.

65. (New) The method of claim 64, wherein sending a portion of the first code includes:

sending an object containing the portion of the first code to the second computing environment.

66. (New) The method of claim 64, wherein executing the portion of the first code includes:

invoking a function included in the second computing environment based on a parameter included in the portion of the first code.

67. (New) The method of claim 64, wherein the portion of the first code is part of an object and executing the portion of the first code includes:

invoking a function included in the second computing environment; and returning to the object as a result of the invocation.

68. (New) The method of claim 64, wherein the second code is provided to the first computing environment by the second computing environment during runtime operations.

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69. (New) The method of claim 64, wherein the second code is an instance of a stub class included in the second computing environment.

70. (New) The method of claim 64, wherein returning results of the executed portion of the first code to the first computing environment includes:

returning the results to the first program.

71. (New) A method performed in a data processing system including a first computing environment and a second computing environment, the method performed by the second computing environment comprising:

receiving a portion of first code included in a program executing in the first computing environment based on second code provided to the first computing environment by the second computing environment;

executing the portion of the first code; and

returning results of the executed portion of the first code to the first computing environment.

72. (New) The method of claim 70, wherein receiving a portion of the first code includes:

receiving an object containing the portion of the first code.

73. (New) The method of claim 70, wherein executing the portion of the first code includes:

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invoking a function included in the second computing environment based on a parameter included in the portion of the first code.

74. (New) The method of claim 70, wherein the portion of the first code is part of an object and executing the portion of the first code includes:

invoking a function included in the second computing environment; and returning the object as a result of the invocation.

- 75. (New) The method of claim 70, further including:

  providing to the first computing environment the second code during runtime operations.
- 76. (New) The method of claim 70, wherein the second code is an instance of a stub class included in the second computing environment.
- 77. (New) The method of claim 70, wherein returning results of the executed portion of the first code to the first computing environment includes: returning the results to the program.
- 78. (New) A computer-readable medium containing instructions that perform a method when executed by a processor, the method performed in a data processing system including a first computing environment and a second computing environment and comprising:

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executing a first program including first code on the first computing environment; sending at least a portion of the first code from the first computing environment to the second computing environment based on second code obtained from the second computing environment;

executing at least the portion of the first code on the second computing environment; and

returning results of the executed portion of the first code to the first computing environment.

79. (New) The computer-readable medium of claim 78, wherein sending a portion of the first code includes:

sending an object containing at least the portion of the first code to the second computing environment.

80. (New) The computer-readable medium of claim 78, wherein executing at least the portion of the first code includes:

invoking a function included in the second computing environment based on a parameter included in at least the portion of the first code.

81. (New) The computer-readable medium of claim 78, wherein the portion of the first code is at least part of an object and executing at least the portion of the first code includes:

invoking a function included in the second computing environment; and

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returning the object as a result of the invocation.

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- 82. (New) The computer-readable medium of claim 78, wherein the second code is provided to the first computing environment by the second computing environment during runtime operations.
- 83. (New) The computer-readable medium of claim 78, wherein the second code is an instance of a stop class included in the second computing environment.
- 84. (New) The computer-readable medium of claim 78, wherein returning results of the executed portion of the first code to the first computing environment includes:

returning the results to the first program.

85. (New) A computer-readable medium including instructions for performing a method when executed by a processor, the method performed in a data processing system including a first computing environment and a second computing environment including the resource, and the method performed by the second computing environment comprising:

receiving a portion of first code included in a program executing in the first computing environment based on second code provided to the first computing environment by the second computing environment;

executing the portion of the first code; and





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returning results of the executed portion of the first code to the first computing environment.

86. (New) The computer-readable medium of claim 85, wherein receiving a portion of the first code includes:

receiving an object containing the portion of the first code.

87. (New) The computer-readable medium of claim 85, wherein executing the portion of the first code includes:

invoking a function included in the second computing environment based on a parameter included in the portion of the first code.

88. (New) The computer-readable medium of claim 85, wherein the portion of the first code is part of an object and executing the portion of the first code includes: invoking a function included in the second computing environment; and returning the object as a result of the invocation.

89. (New) The computer-readable medium of claim 85, further including: providing to the first computing environment the second code during runtime operations.

90. (New) The computer-readable medium of claim 85, wherein the second code is an instance of a stub class included in the second computing environment.

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91. (New) The computer-readable medium of claim 85, wherein returning results of the executed portion of the first code to the first computing environment includes:

returning the results to the program.

92. (New) A system for executing code in a data processing system including a first computing environment and a second computing environment, the system comprising:

means for executing a first program including first code on the first computing environment;

means for sending a portion of the first code from the first computing environment to the second computing environment based on second code obtained from the second computing environment;

means for executing the portion of the first code on the second computing environment; and

means for returning results of the executed portion of the first code to the first computing environment.

93. (New) The system of claim 92, wherein the means for sending a portion of the first code includes:

means for sending an object containing the portion of the first code to the second computing environment.

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94. (New) The system of claim 92, wherein the means for executing the portion of the first code includes:

means for invoking a function included in the second computing environment based on a parameter included in the portion of the first code.

95. (New) The system of claim 92, wherein the portion of the first code is part of an object and the means for executing the portion of the first code includes:

means for invoking a function included in the second computing environment;

means for returning the object as a result of the invocation.

- 96. (New) The system of claim 92, wherein the second code is provided to the first computing environment by the second computing environment during runtime operations.
- 97. (New) the system of claim 92, wherein the second code is an instance of a stub class included in the second computing environment.
- 98. (New) The system of claim 92, wherein the means for returning results of the executed portion of the first code to the first computing environment includes:

  means for returning the results to the first program.

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99. (New) A system for executing code in a data processing system including a first computing environment, the system comprising:

means for receiving a portion of first code included in a program executing in the first computing environment based on second code provided to the first computing environment;

means for executing the portion of the first code; and
means for returning results of the executed portion of the first code to the first
computing environment.

100. (New) The system of claim 99, wherein the means for receiving a portion of the first code includes:

means for receiving an object containing the portion of the first code.

101. (New) The system of claim 99, wherein the means for executing the portion of the first code includes:

means for invoking a local function based on a parameter included in the portion of the first code.

102. (New) The system of claim 99, wherein the portion of the first code is part of an object and the means for executing the portion of the first code includes:

means for invoking a local function; and means for returning the object as a result of the invocation.

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